

# 2009

# Compliance Calendar for Gasoline Dispensing Facilities

#### **DID YOU KNOW?**

There is a <u>new federal regulation</u> 40 CFR 63 Subpart CCCCCC for Gas Dispensing Facilities that you are subject to. EPA has provided a 2 page brochure and it has been attached to the end of this calendar for your convenience.



Keep this calendar for 2 years. This calendar serves as your official record. Transfer all 2007 & 2008 receipts & submitted forms into a 2009 file folder.





Virginia Department of Environmental Quality
Small Business Assistance
PO Box 1105, Richmond, VA 23218-1105
Telephone: 804.698.4000 or Toll-Free: 800.592.5482 ext. 4394 (in-state only)

Fax # 804.698.4510 Email: <a href="mailto:osba@deq.virginia.gov">osba@deq.virginia.gov</a>/osba/





# Table of Contents

Overview	raye 1
Monthly Charts and Calendars for January 2009-December 2009	2-25
Survey and Order Form between September Chart and Calendar	
Definitions for Stage I and II Facilities	
Determining Which Stage I and II Regulations Apply, and What Do I Have to Do?	28
Requirements for Stage I Vapor Control Systems for Tanks over 10,000 Gal	29
Requirements for Stage II Vapor Control Systems	30-31
Recommended Daily Inspection Checklist for Stage II Dispensers	32
Types of Stage II Hoses, Systems and Poppets	33
Examples of Hoses with Problems	34
Underground Storage Tank (UST) Regulatory Background	35
Tank Information for Your Facility	36
UST Basic Compliance Requirements and UST Required Records	37
Requirements for Release "Leak" Detection	38
Requirements for Spill and Overfill Protection	39
Requirements for Corrosion Protection	39
Frequent Walk-Through Inspections	40
Frequent Walk-Through Inspection Checklist	41
UST Resources: DEQ Contacts, Online Resources and Alert	42
Stage II Resources: DEQ Contacts	43
Inspection Tips	43
Regional Map	44

Dago

#### Important Forms at the End of Calendar:

- -Example of Stage II Decal for Gasoline Dispensers (can be copied for use)
- -Stage II Facility Registration and Compliance Form
- -ISBGM Affidavit and Worksheet
- -New federal regulation 40 CFR 63 Subpart CCCCCC EPA brochure

**Keep a file folder in conjunction with the Stage II Calendar:** use a file folder to store copies of submitted FRC forms; training certificates; most recent test results (test every 5 years), copies of repair and purchase orders and parts receipts (**keep for 2 years**).

Keep this calendar for 2 years. This calendar serves as your official record.

### Overview

The Virginia Small Business Assistance Program developed this calendar to help gasoline distributors (stations) comply with environmental requirements for the transfer of fuel. We hope you find this calendar to be a helpful tool for meeting Stage I and Stage II Vapor Recovery requirements, especially your recordkeeping obligations.

The calendar explains the compliance requirements for Stage I and Stage II regulations, on pages 28-34. If you need additional guidance on your responsibilities, you will find contacts for Stage I and Stage II requirements on page 43. On pages 35-41, the calendar provides information on the compliance requirements for underground storage tanks (USTs), and on page 42, you will find contacts and additional resources for UST requirements. We have added a few new items to this year's calendar: a Table of Contents found on the above page to help you locate documents within; Definitions for Stage I and II Facilities on pages 26-27, and Inspection Tips on page 44.

In the back of the calendar, you will find a copy of the Stage II Facility Registration and Compliance Form and a sample label for you to copy should you need to replace the labels on your fuel dispensers. Use these documents as you need. When you submit forms or any correspondence to DEQ always provide your Registration Number and keep a copy of your letter or form for your records. We suggest using "Certified Return Receipt Requested" mail for any correspondence with DEQ. That way you will have a record that DEQ received your mailing.

<u>You should keep this calendar for 2 years</u> – this calendar serves as your official record. In addition to using the calendar you will need to file folder for the previous 2 years - calendars, all other receipts, forms and records to keep in one place.

Please feel free to contact us with questions and comments regarding this calendar:

**Telephone #:** (804) 698-4000 or (800) 592-5482 Ext. 4394 (in-state only)

**FAX** #: (804) 698-4510

Email Us: osba@deq.virginia.gov

Ja	nua	ry	20	09

Is the Facility Registration and Compliance Form (FRC) up to date?	YES	NO
Are the Training Certificates up-to-date for your current employees?	YES	NO
Do you have a copy of your most recent test results on site?	YES	NO

Inspection Point	Inspected				Repair Logged on Maintenance Record		
STAGE I VAPOR CONTROL SYSTEM — Underground Storage Tanks							
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N	
Caps locked on, with gaskets in place	Υ	N	Υ	N	Υ	N	
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Υ	N	
Pressure vacuum vent installed, not damaged	Υ	N	Υ	N	Υ	N	
STAGE II VAPOR CONTROL SYSTEM — Gasoline Dispensing Equipment							
HOSE(S)							
Hose proper length	Υ	N	Υ	N	Υ	N	
No kinks, flat spots, tears, or cuts	Y	N	Y	N	Υ	N	
NOZZLE BELLOWS (1/4" rod test)	Υ	N	Υ	N	Υ	N	
NOZZLE FACEPLATE/CONE							
No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N	
NOZZLE							
Auto shutoff working properly *	Υ	N	Υ	N	Υ	N	
VAPOR PROCESSING UNIT WORKING	Υ	N	Υ	N	Υ	N	
STAGE II DECAL ON DISPENSERS	Υ	N	Υ	N	Υ	N	

Stage :	I Red	guirem	ents
---------	-------	--------	------

Please review the guidance documents found on pages 26-29.

### **Stage II Requirements**

Please review the guidance documents found on pages 26-28, and 30-32.

\* Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled.

certify the monthly inspection results to be accurate: _			
	Printed Name	Signature	Date

### Maintenance Records for Stage I and Stage II Systems

Problem/Solution (include pump number)	Date Repaired	Part	Manufacturer's Description



Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
				Daily Inspection	Daily Inspection □	Daily Inspection
4	5	6	7	8	9	10
Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection □
11	12	13	14	15	16	17
Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection □
18	19	20	21	22	23	24
Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection □
25	26	27	28	29	30	31
Daily Inspection □	MONTHLY INSPECTION					

February 2009
---------------

Is the Facility Registration and Compliance Form (FRC) up to date?	YES	NO
Are the Training Certificates up-to-date for your current employees?	YES	NO
Do you have a copy of your most recent test results on site?	YES	NO

Inspection Point	Inspe	ected	Repa	aired	on Main	Logged tenance cord	
STAGE I VAPOR CONTROL SYSTEM — Und	l ergrour	nd Stor	⊥ age Tar	ıks			Stage I Require
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N	Please review the g
Caps locked on, with gaskets in place	Υ	N	Y	N	Υ	N	pages 26-29.
Fill tube/adapter not damaged, or loose	Υ	N	Y	N	Υ	N	]
Pressure vacuum vent installed, not damaged	Υ	N	Υ	N	Υ	N	Character Description
STAGE II VAPOR CONTROL SYSTEM — Gas	oline D	ispens	ing Equ	ipmer	nt		Stage II Requir
HOSE(S)							Please review the g
Hose proper length	Υ	N	Υ	N	Υ	N	pages 26-28, and 30
No kinks, flat spots, tears, or cuts	Υ	N	Υ	N	Υ	N	1
NOZZLE BELLOWS (1/4" rod test)	Υ	N	Υ	N	Υ	N	1
NOZZLE FACEPLATE/CONE			•		•		]
No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N	1
NOZZLE			•		•		]
Auto shutoff working properly *	Υ	N	Υ	N	Υ	N	* Some local municipa
VAPOR PROCESSING UNIT WORKING	Υ	N	Υ	N	Υ	N	HOLD OPEN LATCH
STAGE II DECAL ON DISPENSERS	Υ	N	Υ	N	Y	N	1

I certify the monthly inspection results to be accurate: _			
	Printed Name	Signature	Date

### Maintenance Records for Stage I and Stage II Systems

Problem/Solution (include pump number)	Date Repaired	Part	Manufacturer's Description

# ements

guidance documents found on

### rements

guidance documents found on 30-32.

oal Fire Marshals require that CHES be removed or disabled.

# February 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
Daily Inspection	Daily Inspection □	Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection □
8	9	10	11	12	13	14
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection
15	16	17	18	19	20	21
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection
22	23	24	25	26	27	28
Daily Inspection	Daily Inspection □	Daily Inspection □	Daily Inspection □	Daily Inspection □	Daily Inspection	MONTHLY INSPECTION

ı	NΛ	2	r	_	h	2	N	U	C
	W	a		L	•	Z	u	u	ы

Is the Facility Registration and Compliance Form (FRC) up to date?	YES	NO
Are the Training Certificates up-to-date for your current employees?	YES	NO
Do you have a copy of your most recent test results on site?	YES	NO

Inspection Point	Inspe	ected	Rep	aired	on Main	Logged tenance cord	
STAGE I VAPOR CONTROL SYSTEM — Unde	ergroui	nd Stor	⊣ age Taı	nks	1		Stage I Requirements
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N	Please review the guidance documents four
Caps locked on, with gaskets in place	Υ	N	Υ	N	Υ	N	pages 26-29.
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Υ	N	
Pressure vacuum vent installed, not damaged	Υ	N	Υ	N	Υ	N	Stage II Deguirements
STAGE II VAPOR CONTROL SYSTEM — Gas	oline D	ispens	ing Equ	uipmen	t		Stage II Requirements
HOSE(S)							Please review the guidance documents four
Hose proper length	Υ	N	Υ	N	Υ	N	pages 26-28, and 30-32.
No kinks, flat spots, tears, or cuts	Υ	N	Y	N	Y	N	
NOZZLE BELLOWS (1/4" rod test)	Υ	N	Y	N	Y	N	
NOZZLE FACEPLATE/CONE							
No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N	
NOZZLE							
Auto shutoff working properly *	Υ	N	Υ	N	Υ	N	* Some local municipal Fire Marshals require tha
VAPOR PROCESSING UNIT WORKING	Υ	N	Υ	N	Υ	N	HOLD OPEN LATCHES be removed or disabled
STAGE II DECAL ON DISPENSERS	Υ	N	Υ	N	Υ	N	

Printed Name

### Maintenance Records for Stage I and Stage II Systems

Problem/Solution (include pump number)	Date Repaired	Part	Manufacturer's Description

Signature

Date



# March 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □
8	9	10	11	12	13	14
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection
15	16	17	18	19	20	21
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
22	23	24	25	26	27	28
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection
29	30	31				
Daily Inspection □	Daily Inspection	MONTHLY INSPECTION				

# **April 2009**

Is the Facility Registration and Compliance Form (FRC) up to date?	YES	NO
Are the Training Certificates up-to-date for your current employees?	YES	NO
Do you have a copy of your most recent test results on site?	YES	NO

### **Monthly Inspections** — Perform Last Working Day of Each Month

Inspection Point	Insp	ected	Rep	aired	Repair on Main Rec		
STAGE I VAPOR CONTROL SYSTEM — Und	ergroui	nd Stor	age Tar	nks			Stage I Requirements
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N	Please review the guidance documents found of
Caps locked on, with gaskets in place	Υ	N	Υ	N	Υ	N	pages 26-29.
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Υ	N	
Pressure vacuum vent installed, not damaged	Υ	N	Υ	N	Υ	N	Stage II Dequirements
STAGE II VAPOR CONTROL SYSTEM — Gas	oline D	ispens	ing Equ	ıipmen	t		Stage II Requirements
HOSE(S)							Please review the guidance documents found of pages 26-28, and 30-32.
Hose proper length	Υ	N	Υ	N	Υ	N	pages 20-28, and 50-32.
No kinks, flat spots, tears, or cuts	Υ	N	Υ	N	Υ	N	
NOZZLE BELLOWS (1/4" rod test)	Υ	N	Υ	N	Υ	N	
NOZZLE FACEPLATE/CONE							
No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N	
NOZZLE							
Auto shutoff working properly *	Υ	N	Υ	N	Υ	N	* Some local municipal Fire Marshals require that
VAPOR PROCESSING UNIT WORKING	Υ	N	Υ	N	Υ	N	HOLD OPEN LATCHES be removed or disabled.
STAGE II DECAL ON DISPENSERS	Υ	N	Υ	N	Υ	N	
I certify the monthly inspection results to be acc	urate: _	Prin	ted Name	e			Signature Date

# Maintenance Records for Stage I and Stage II Systems

Problem/Solution (include pump number)	Date Repaired	Part	Manufacturer's Description

# April 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
			Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection □
5	6	7	8	9	10	11
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection □
12	13	14	15	16	17	18
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection □
19	20	21	22	23	24	25
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection □
26	27	28	29	30		
Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection □	MONTHLY INSPECTION		

Is the Facility Registration and Compliance Form (FRC) up to date?	YES	NO
Are the Training Certificates up-to-date for your current employees?	YES	NO
Do you have a copy of your most recent test results on site?	YES	NO

Inspection Point	Insp	ected	Rep	aired	on Main	Logged tenance cord	
STAGE I VAPOR CONTROL SYSTEM — Under	ergrou	nd Stor	age Tai	nks			Stage I Requirements
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N	Please review the guidance documents found of
Caps locked on, with gaskets in place	Υ	N	Υ	N	Υ	N	pages 26-29.
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Υ	N	
Pressure vacuum vent installed, not damaged	Υ	N	Υ	N	Υ	N	Stage II Poquirements
STAGE II VAPOR CONTROL SYSTEM — Gas	oline D	ispens	ing Equ	uipmen	t		Stage II Requirements  Please review the guidenes decuments found of
HOSE(S)							Please review the guidance documents found of pages 26-28, and 30-32.
Hose proper length	Υ	N	Υ	N	Υ	N	pages 20-28, and 50-32.
No kinks, flat spots, tears, or cuts	Υ	N	Υ	N	Υ	N	
NOZZLE BELLOWS (1/4" rod test)	Υ	N	Υ	N	Υ	N	
NOZZLE FACEPLATE/CONE							
No tears or rips, not loose from nozzle	Υ	N	Υ	N	Y	N	
NOZZLE							
Auto shutoff working properly *	Υ	N	Υ	N	Υ	N	* Some local municipal Fire Marshals require that
VAPOR PROCESSING UNIT WORKING	Υ	N	Υ	N	Υ	N	HOLD OPEN LATCHES be removed or disabled.
STAGE II DECAL ON DISPENSERS	Υ	N	Y	N	Υ	N	
I certify the monthly inspection results to be acc	urate:	Prin	ted Nam	e			Signature Date

# Maintenance Records for Stage I and Stage II Systems

Problem/Solution (include pump number)	Date Repaired	Part	Manufacturer's Description



# May 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
					Daily Inspection □	Daily Inspection □
3	4	5	6	7	8	9
Daily Inspection □						
10	11	12	13	14	15	16
Daily Inspection □						
17	18	19	20	21	22	23
Daily Inspection □						
24	25	26	27	28	29	30
Daily Inspection □						
31						
MONTHLY						
INSPECTION						

J	ur	1e	2	N	O	9

Is the Facility Registration and Compliance Form (FRC) up to date?	YES	NO
Are the Training Certificates up-to-date for your current employees?	YES	NO
Do you have a copy of your most recent test results on site?	YES	NO

Inspection Point	Inspe	ected	Repaired		on Main	Logged tenance cord	
STAGE I VAPOR CONTROL SYSTEM — Unde	ergroui	nd Stor	age Tai	ıks			Stage I Requirements
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N	Please review the guidance documents four
Caps locked on, with gaskets in place	Υ	N	Υ	N	Υ	N	pages 26-29.
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Y	N	
Pressure vacuum vent installed, not damaged	Υ	N	Υ	N	Y	N	Chara II Dagwiyamanta
STAGE II VAPOR CONTROL SYSTEM — Gas	oline D	ispens	ing Eqເ	ıipmen	t		Stage II Requirements
HOSE(S)							Please review the guidance documents four
Hose proper length	Υ	N	Υ	N	Υ	N	pages 26-28, and 30-32.
No kinks, flat spots, tears, or cuts	Υ	N	Υ	N	Υ	N	
NOZZLE BELLOWS (1/4" rod test)	Υ	N	Υ	N	Υ	N	
NOZZLE FACEPLATE/CONE							
No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N	
NOZZLE							
Auto shutoff working properly *	Υ	N	Υ	N	Y	N	* Some local municipal Fire Marshals require tha
VAPOR PROCESSING UNIT WORKING	Υ	N	Υ	N	Y	N	HOLD OPEN LATCHES be removed or disabled
STAGE II DECAL ON DISPENSERS	Υ	N	Υ	N	Υ	N	

I certify the monthly inspection results to be accurate:			
	Printed Name	Signature	Date

### Maintenance Records for Stage I and Stage II Systems

Problem/Solution (include pump number)	Date Repaired	Part	Manufacturer's Description



# June 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
	Daily Inspection □					
7	8	9	10	11	12	13
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
14	15	16	17	18	19	20
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection
21	22	23	24	25	26	27
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection □
28	29	30				
Daily Inspection	Daily Inspection □	MONTHLY INSPECTION				

Is the Facility Registration and Compliance Form (FRC) up to date?	YES	NO
Are the Training Certificates up-to-date for your current employees?	YES	NO
Do you have a copy of your most recent test results on site?	YES	NO

Inspection Point	Insp	ected	Repaired		on Main	Logged tenance cord	
STAGE I VAPOR CONTROL SYSTEM — Unde	ergroui	nd Stor	age Tai	nks			Stage I Requirements
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N	Please review the guidance documents foun
Caps locked on, with gaskets in place	Υ	N	Υ	N	Y	N	pages 26-29.
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Υ	N	
Pressure vacuum vent installed, not damaged	Υ	N	Υ	N	Υ	N	Stage II Deguirements
STAGE II VAPOR CONTROL SYSTEM — Gas	oline D	ispens	ing Equ	ıipmen	t		Stage II Requirements
HOSE(S)							Please review the guidance documents foun pages 26-28, and 30-32.
Hose proper length	Υ	N	Υ	N	Υ	N	pages 20-28, and 30-32.
No kinks, flat spots, tears, or cuts	Υ	N	Υ	N	Υ	N	
NOZZLE BELLOWS (1/4" rod test)	Υ	N	Υ	N	Υ	N	
NOZZLE FACEPLATE/CONE							
No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N	
NOZZLE							
Auto shutoff working properly *	Υ	N	Υ	N	Y	N	* Some local municipal Fire Marshals require that
VAPOR PROCESSING UNIT WORKING	Υ	N	Υ	N	Υ	N	HOLD OPEN LATCHES be removed or disabled
STAGE II DECAL ON DISPENSERS	Υ	N	Υ	N	Υ	N	

* Some l	cal municipal Fire Marshals require that
HOLD O	EN LATCHES be removed or disabled

I certify the monthly inspection results to be accurate: _			
	Printed Name	Signature	Date

### Maintenance Records for Stage I and Stage II Systems

Problem/Solution (include pump number)	Date Repaired	Part	Manufacturer's Description

# July 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
			Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □
5	6	7	8	9	10	11
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
12	13	14	15	16	17	18
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection
19	20	21	22	23	24	25
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
26	27	28	29	30	31	
Daily Inspection	Daily Inspection □	Daily Inspection □	Daily Inspection □	Daily Inspection □	MONTHLY INSPECTION	

August 2009
-------------

Is the Facility Registration and Compliance Form (FRC) up to date?	YES	NO
Are the Training Certificates up-to-date for your current employees?	YES	NO
Do you have a copy of your most recent test results on site?	YES	NO

Inspection Point	Inspe	ected	Rep	aired	Repair on Maint	tenance	
STAGE I VAPOR CONTROL SYSTEM — Und	ergroui	nd Stor	age Tai	nks	1		Stage I Requirements
Spill containment buckets clean and dry	Y	N	Υ	N	Υ	N	Please review the guidance document
Caps locked on, with gaskets in place	Υ	N	Υ	N	Υ	N	pages 26-29.
Fill tube/adapter not damaged, or loose	Y	N	Υ	N	Υ	N	
Pressure vacuum vent installed, not damaged	Y	N	Υ	N	Υ	N	Stago II Poquiroments
STAGE II VAPOR CONTROL SYSTEM — Gas	oline D	ispens	ing Equ	uipmen	t		<b>Stage II Requirements</b> Please review the guidance document
HOSE(S)							pages 26-28, and 30-32.
Hose proper length	Υ	N	Υ	N	Υ	N	pages 20-20, and 50-32.
No kinks, flat spots, tears, or cuts	Y	N	Υ	N	Υ	N	
NOZZLE BELLOWS (1/4" rod test)	Υ	N	Υ	N	Υ	N	
NOZZLE FACEPLATE/CONE							
No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N	
NOZZLE							
Auto shutoff working properly *	Υ	N	Υ	N	Υ	N	* Some local municipal Fire Marshals requ
VAPOR PROCESSING UNIT WORKING	Υ	N	Υ	N	Υ	N	HOLD OPEN LATCHES be removed or disabled
VAI ON I NOOLOOMO ONII WONING		_	T .	N	Υ	N	

# Maintenance Records for Stage I and Stage II Systems

Problem/Solution (include pump number)	Date Repaired	Part	Manufacturer's Description

# August 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
						Daily Inspection □
2	3	4	5	6	7	8
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection
9	10	11	12	13	14	15
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection □
16	17	18	19	20	21	22
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection
23	24	25	26	27	28	29
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection □
30	31					
Daily Inspection	MONTHLY INSPECTION □					

September	2009	)
-----------	------	---

Is the Facility Registration and Compliance Form (FRC) up to date?	YES	NO
Are the Training Certificates up-to-date for your current employees?	YES	NO
Do you have a copy of your most recent test results on site?	YES	NO

Inspection Point	Inspe	ected	Rep	aired	on Main	Logged tenance cord	
STAGE I VAPOR CONTROL SYSTEM — Und	ergrou	nd Stor	age Ta	ıks			Stage I Requirements
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N	Please review the guidance documents f
Caps locked on, with gaskets in place	Y	N	Υ	N	Y	N	pages 26-29.
Fill tube/adapter not damaged, or loose	Y	N	Υ	N	Y	N	
Pressure vacuum vent installed, not damaged	Y	N	Υ	N	Y	N	Stage II Requirements
STAGE II VAPOR CONTROL SYSTEM — Gas HOSE(S)	oline D	ispens	ing Equ	uipmen	ıt		Please review the guidance documents to
Hose proper length	Υ	N	Υ	N	Υ	N	pages 26-28, and 30-32.
No kinks, flat spots, tears, or cuts	Υ	N	Υ	N	Υ	N	
NOZZLE BELLOWS (1/4" rod test)	Y	N	Υ	N	Y	N	
NOZZLE FACEPLATE/CONE							
No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N	
NOZZLE							
Auto shutoff working properly *	Υ	N	Υ	N	Υ	N	* Some local municipal Fire Marshals require
	Υ	N	Υ	N	Υ	N	HOLD OPEN LATCHES be removed or disa
VAPOR PROCESSING UNIT WORKING							

# Printed Name Signature

### Maintenance Records for Stage I and Stage II Systems

Problem/Solution (include pump number)	Date Repaired	Part	Manufacturer's Description

### Page 18

Date



# September 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
		Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection □
6	7	8	9	10	11	12
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection
13	14	15	16	17	18	19
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection
20	21	22	23	24	25	26
Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection
27	28	29	30			
Daily Inspection □	Daily Inspection □	Daily Inspection □	MONTHLY INSPECTION			

$\cap$	cto	ber	20	NO
U	CLO	uei	ZU	UJ

Is the Facility Registration and Compliance Form (FRC) up to date?	YES	NO
Are the Training Certificates up-to-date for your current employees?	YES	NO
Do you have a copy of your most recent test results on site?	YES	NO

Inspection Point	Insp	ected	Rep	aired	on Main	Logged tenance cord	
STAGE I VAPOR CONTROL SYSTEM — Unde	l ergroui	nd Stor	age Tar	nks			Stage I Requirements
Spill containment buckets clean and dry	Υ	N	Y	N	Y	N	Please review the guidance documents found
Caps locked on, with gaskets in place	Υ	N	Y	N	Y	N	pages 26-29.
Fill tube/adapter not damaged, or loose	Υ	N	Y	N	Y	N	
Pressure vacuum vent installed, not damaged	Υ	N	Y	N	Υ	N	Chara II Dogwiyamanta
STAGE II VAPOR CONTROL SYSTEM — Gas	oline D	ispens	ing Equ	ıipmen	t		Stage II Requirements
HOSE(S)							Please review the guidance documents found
Hose proper length	Υ	N	Υ	N	Y	N	pages 26-28, and 30-32.
No kinks, flat spots, tears, or cuts	Υ	N	Y	N	Y	N	
NOZZLE BELLOWS (1/4" rod test)	Υ	N	Υ	N	Y	N	
NOZZLE FACEPLATE/CONE							
No tears or rips, not loose from nozzle	Υ	N	Y	N	Y	N	
NOZZLE							
Auto shutoff working properly *	Υ	N	Υ	N	Y	N	* Some local municipal Fire Marshals require that
VAPOR PROCESSING UNIT WORKING	Υ	N	Υ	N	Υ	N	HOLD OPEN LATCHES be removed or disabled.
STAGE II DECAL ON DISPENSERS	Υ	N	Υ	N	Υ	N	

I certify the monthly inspection results to be accurate: _			
	Printed Name	Signature	Date

### Maintenance Records for Stage I and Stage II Systems

Problem/Solution (include pump number)	Date Repaired	Part	Manufacturer's Description

### Page 20



# October 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
				Daily Inspection □	Daily Inspection	Daily Inspection □
4	5	6	7	8	9	10
Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection □	Daily Inspection	Daily Inspection
11	12	13	14	15	16	17
Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection □	Daily Inspection	Daily Inspection
18	19	20	21	22	23	24
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection
25	26	27	28	29	30	31
Daily Inspection	Daily Inspection □	MONTHLY INSEPCTION				

N	0\	/6	m	h	er	2	0	0	9
	•			_	•	_	•	u	~

Is the Facility Registration and Compliance Form (FRC) up to date?	YES	NO
Are the Training Certificates up-to-date for your current employees?	YES	NO
Do you have a copy of your most recent test results on site?	YES	NO

Inspection Point	Insp	ected	Repa	aired	on Main	Logged tenance cord	
STAGE I VAPOR CONTROL SYSTEM — Unde	ergroui	nd Stor	l age Tar	nks			Stage I Requirements
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N	Please review the guidance documents found
Caps locked on, with gaskets in place	Υ	N	Υ	N	Y	N	pages 26-29.
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Y	N	
Pressure vacuum vent installed, not damaged	Υ	N	Υ	N	Y	N	Chara II Dominomonto
STAGE II VAPOR CONTROL SYSTEM — Gas	oline D	ispens	ing Eqເ	iipmen	nt .		Stage II Requirements
HOSE(S)							Please review the guidance documents found
Hose proper length	Υ	N	Υ	N	Υ	N	pages 26-28, and 30-32.
No kinks, flat spots, tears, or cuts	Υ	N	Υ	N	Y	N	
NOZZLE BELLOWS (1/4" rod test)	Υ	N	Υ	N	Y	N	
NOZZLE FACEPLATE/CONE							
No tears or rips, not loose from nozzle	Υ	N	Υ	N	Y	N	
NOZZLE							
Auto shutoff working properly *	Υ	N	Υ	N	Y	N	* Some local municipal Fire Marshals require that
VAPOR PROCESSING UNIT WORKING	Υ	N	Υ	N	Υ	N	HOLD OPEN LATCHES be removed or disabled.
STAGE II DECAL ON DISPENSERS	v	N	Υ	N	Υ	N	

Printed Name

•	•
HOLD OPEN LATCHES	be removed or disabled.

Signature

### Maintenance Records for Stage I and Stage II Systems

Problem/Solution (include pump number)	Date Repaired	Part	Manufacturer's Description

Page 22

Date

# uirements

the guidance documents found on

### quirements

the guidance documents found on nd 30-32.



# November 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
Daily Inspection	Daily Inspection □					
8	9	10	11	12	13	14
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
15	16	17	18	19	20	21
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
22	23	24	25	26	27	28
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
29	30					
Daily Inspection	MONTHLY INSPECTION					

December	20	09
----------	----	----

Is the Facility Registration and Compliance Form (FRC) up to date?	YES	NO
Are the Training Certificates up-to-date for your current employees?	YES	NO
Do you have a copy of your most recent test results on site?	YES	NO

Inspection Point	Insp	ected	Rep	aired	on Main	Logged tenance cord	
STAGE I VAPOR CONTROL SYSTEM — Unde	⊥ ergroui	nd Stor	⊣ rage Taı	nks	1		Stage I Requirements
Spill containment buckets clean and dry	Υ	N	Y	N	Υ	N	Please review the guidance documents found
Caps locked on, with gaskets in place	Υ	N	Y	N	Υ	N	pages 26-29.
Fill tube/adapter not damaged, or loose	Υ	N	Y	N	Υ	N	
Pressure vacuum vent installed, not damaged	Y	N	Υ	N	Υ	N	Chara II Dagwiyamanta
STAGE II VAPOR CONTROL SYSTEM — Gas	oline D	ispens	ing Equ	ıipmen	t		Stage II Requirements
HOSE(S)		_		•			Please review the guidance documents found pages 26-28, and 30-32.
Hose proper length	Υ	N	Y	N	Υ	N	pages 20-20, and 50-32.
No kinks, flat spots, tears, or cuts	Υ	N	Υ	N	Y	N	
NOZZLE BELLOWS (1/4" rod test)	Υ	N	Y	N	Υ	N	
NOZZLE FACEPLATE/CONE							
No tears or rips, not loose from nozzle	Υ	N	Y	N	Υ	N	
NOZZLE							
Auto shutoff working properly *	Υ	N	Y	N	Υ	N	* Some local municipal Fire Marshals require that
VAPOR PROCESSING UNIT WORKING	Υ	N	Υ	N	Y	N	HOLD OPEN LATCHES be removed or disabled.
STAGE II DECAL ON DISPENSERS	Y	N	Y	N	Υ	N	

Printed Name

### Maintenance Records for Stage I and Stage II Systems

oblem/Solution (include pump number) Date Repaired		Part	Manufacturer's Description	

Signature

Date



# December 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
		Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □
6	7	8	9	10	11	12
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
13	14	15	16	17	18	19
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
20	21	22	23	24	25	26
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection □
27	28	29	30	31		D LIST: the 2010 Compliance
Daily Inspection	Daily Inspection □	Daily Inspection □	Daily Inspection □	MONTHLY INSPECTION	Calendar for Gas	Dispensing folder & transfer all



# Vapor Recovery System Compliance Calendar

# Definitions for Stage I and II Facilities

**Average Monthly Throughput (AMT)** - average monthly amount of gasoline pumped at a gasoline dispensing facility during the two most recent consecutive calendar years, or some other two year period which is representative of normal source operation. Downtime, such as a full or significant shutdown of a facility's operation due to construction, shall not be included when calculating average monthly throughput.

Certified Stage II Vapor Recovery System - any system certified by California Air Resources Board (CARB) as having a vapor recovery or removal efficiency of at least 95% and approved under the provisions of AQP9, (see 9 VAC 520121).

**Defective Equipment** - any absence, disconnection, or malfunctioning of a Stage II vapor recovery system component required by this article including, but not limited to, the following:

- a. A vapor return line that is crimped, flattened, blocked, or that has any hole, or slit that allows vapors to leak out;
- b. A nozzle bellow that has any hole large enough to allow a 1/4 inch diameter cylindrical rod to pass through it or any slit one inch or more in length;
- c. A nozzle faceplate or cone that is torn or missing over 25% of its surface;
- d. A nozzle with no automatic overfill control mechanism, or an inoperable overfill control mechanism; and
- e. An inoperable or malfunctioning vapor processing unit, vacuum generating device, pressure, or vacuum relief valve, vapor check valve, or any other equipment normally used to dispense gasoline or is required by Article 37.

Environmental Compliance Device - see Vapor Escape Guard.

Facecone/Faceplate - see Splash Guard.

**Gasoline** - any petroleum distillate having a Reid vapor pressure of four pounds per square inch or greater.

Gasoline Dispensing Facility - any site where gasoline is dispensed to motor vehicle tanks from stationary storage tanks.

**Independent Small Business Gasoline Marketer (ISBGM)** - a person engaged in the marketing of gasoline who owns one, or more gasoline dispensing facilities, and is required to pay for procurement and installation of vapor recovery equipment, unless such owner;

- a. Is a refiner; controls, or is controlled by, or is under common control with, a refiner; or is otherwise directly or indirectly affiliated with a refiner, or with a person who controls, is controlled by, or is under a common control with a refiner (unless the sole affiliation is by means of a supply contract, or an agreement, or contract to use a trademark, trade name, service mark, or other identifying symbol or name owned by such refiner or any such person); or
- b. Receives less than 50% of his annual income from refining, or marketing of gasoline.

**Inspector** - any VA Department of Environmental Quality (DEQ) employee designated as having the authority to conduct official compliance evaluations (a.k.a. inspections).

**Major System Modification** - the replacement, repair or upgrade of 75% of a facility's Stage II vapor recovery system equipment. Nozzle the spout at the end of the gasoline hose used to dispense and control the flow of gasoline from a stationary gasoline storage tank into motor vehicle fuel tanks.

# Definitions for Stage I and II Facilities (Continued)

**Nozzle Bellows** - a flexible component of a nozzle on a Stage II Balance System that is compressed to establish a seal between the nozzle faceplate and filler neck of the motor vehicle fuel tank.

**Operator** - a dealer, or other person who is responsible for the daily operation and maintenance of a gasoline dispensing facility and who is subject to the inspection, training, and reporting requirements.

**Owner** - any person, including bodies politic or corporate, associations, partnerships, personal representatives, trustees and committees, as well as individuals who own, lease, operate, control or supervise an operation involving the storage, or transfer of petroleum liquids, or both.

**Splash Guard** - a flexible disk that fits over a nozzle spout. The sole purpose of a splash guard is to minimize the customers expose to gasoline that may splash out of the vehicle during the fuel transfer process. The disk slides over the nozzle spout and is not required to demonstrate compliance with Virginia's regulations because it does not affect the control efficiency of the vapor recovery system.

**Stage II Vapor Recovery System** - any equipment designed and used to collect, recover, or destroy, or any combination of those, gasoline vapors displaced during the transfer of gasoline into a motor vehicle fuel tank.

**Tag Out Of Service** - to place out of service by use of a conspicuously located tag, or sign on a nozzle that prohibits the use of any nozzle associated with defective equipment.

Type 1 Safety Vest - an orange safety vest that is designed for use in parking areas where speeds do not exceed 25 miles per hour.

**Vacuum Assist System** - an assist system designed to enhance vapor recovery at the nozzle/fill pipe interface by drawing in vapors using a vacuum. This design allows assist systems to recover vapors effectively without a tight seal at the nozzle/fill pipe interface.

Vapor Balance System - operates on the principle of positive displacement during gasoline transfer operations. Balance systems use pressure created in the vehicle fuel tank by the incoming liquid gasoline and the slight negative pressure created in the storage tank by the departing liquid to transfer the vapors through the combustion fuel dispensing/vapor collection nozzle, through the vapor passage, and into the service station tank. Because a slight pressure is generally created at the nozzle/fill pipe interface, effective operation requires that a tight seal be made at the interface during vehicle fueling to minimize vapor leakage into the atmosphere.

Vapor Escape Guard (VEG or ECD) - a small flexible cone shaped boot installed on the nozzle spout. VEG's and ECD's are an integral part of the vapor collection system and can easily be identified because they are required to be secured to the nozzle by a mechanical clasp or seal.



Vapor Recovery System Compliance Calendar

# Determining Which Stage I and II Regulations Apply, and What Do I Have to Do?

### **Available Exemptions from Stage I and II Requirements**

You are **exempt** from Stage I and II regulatory requirements if your Average Monthly Throughput (AMT) is **less then 10,000 gallons** and has never been 10, 000 gallons or more since January 1, 1993, and/or if your storage tank **is less than 250 gallons in capacity**. In either case, owners are required to maintain adequate records of AMT and furnish these records to DEQ upon request.

You can be **exempt from Stage II regulatory requirements** because you are an Independent Small Business Gasoline Marketer (ISBGM), if your AMT is **more than 10,000 gallons and less than 50,000 gallons**; and you, as an owner/operator, are **not affiliated with a refinery**; and **50% or more of your annual income** comes from the sale of gasoline. Regulatory citation: 9 VAC 5-40-5200 E-3(a) and 9 VAC 5-40-5200F-4(6)

### **Determining if Stage I Requirements Apply**

You are required to follow Stage I requirements, if your AMT is 10,000 gallons or more, and your station is located in Arlington County, Alexandria City, Fairfax County, Fairfax City, Loudoun County, Falls Church City, Prince William County, Manassas City, Manassas Park City, Stafford County, Charles City County, Chesterfield County, Hanover County, Henrico County, Prince George County, Richmond City, Hopewell City, Colonial Heights City, Petersburg City, Roanoke County, Roanoke City, Salem City, James City County, Poquoson City, York County, Isle of Wight County, Gloucester County, Portsmouth City, Chesapeake City, Suffolk City, Hampton City, Virginia Beach City, Newport News City, Williamsburg City, or Norfolk City. See Stage I fact sheet on page 29.

### **Determining if Stage II Requirements Apply**

If you are subject to Stage I requirements and your AMT is 10,000 gallons or more, first determine if you are exempt as an ISBGM. If you are not considered an ISBGM, and the owner has not filed an ISBGM affidavit with your regional DEQ office, then you are required to follow Stage I and II requirements.

You are required to follow Stage I and Stage II requirements, if your AMT is 10,000 gallons or more and you are not an ISBGM, and your station is located in Arlington County, Alexandria City, Fairfax County, Fairfax City, Loudoun County, Falls Church City, Prince William County, Manassas City, Manassas Park City, Stafford County, Chesterfield County, Hanover County, Henrico County, Colonial Heights City, Hopewell City, Richmond City, or Charles City County. Regulatory citation: 9 VAC 5-40-5200 (Rule 4-37). See Stage I fact sheet on page 29 and Stage II fact sheet on pages 30-31.

# Requirements for **Stage I** Vapor Control Systems for Tanks <u>over</u> 10,000 Gallons

#### **Stage I Vapor Control System Requirements**

Regulation Citation: 9 VAC 5-40-5220 (E); 9 VAC 5-40-5230 (E)

- No gasoline from any delivery truck can be transferred into a stationary storage tank unless the tank is equipped with a vapor control system. The vapor control system must be able to remove, destroy, or prevent 90% (by weight) of any discharge of gasoline vapors (volatile organic compound emissions).
- 2. Before gasoline can be transferred from a delivery truck to the tank the owner must ensure that the vapor control system consists of:
  - A. A submerged fill pipe.
  - B. A vapor recovery system that includes:
    - 1. A vapor tight return line from the storage container to the tank truck must be connected before gasoline is transferred from the truck to the tank.
    - 2. Any adsorption or condensation system
    - 3. A system that has equal to or better control efficiency this must be approved by DEQ.
  - C. The vapor balancing system must meet the following requirements:
    - 1. **NO LEAKS** during loading or unloading in the tank trucks pressure vacuum relief valves and hatch covers, the truck tank, the storage tank, or vapor return lines.
    - Pressure Relief Valves on the storage tank and the tank truck should be set to release at no less than .7 psi or at the highest possible pressure allowed by the National Fire Prevention Association of Standards: Standard for Tank Vehicles for Flammable and Combustible Liquids; Flammable and Combustible Liquids Code; Code for Motor Fuel Dispensing Facilities and Repair Garages. (NFPA, Batterymarch Park, Quincy Mass. ([617] 770- 3000).
    - 3. Pressure in the vapor collection lines should not exceed the tank truck pressure relief valve settings.
    - All loading and vapor lines must be equipped with fittings which make vapor tight connections and which close when disconnected.

#### **Recommended Daily Checklist**

Regulation Citation: Air Quality Policy 9 (AQP-9)

#### Spill buckets clean and dry

Make sure no liquid is in the bottom of the bucket. Remove it if present.

Spill buckets must be vapor tight

Check for other foreign debris, and removed if present.

#### Caps locked on with gaskets in place

Make sure that the locking caps on the fill and vapor tubes are locked in place and that the gasket is in place and secure.

#### Fill tube not damaged, bent or loose

Make sure the UST fittings on the product fill tubes and vapor tubes are secure in place without any sign of damage or leaks.

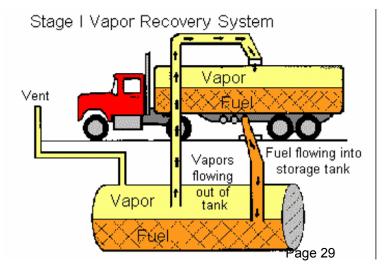
#### Pressure Vacuum (PV) Valves installed, not damaged

Visually inspect PV Valves to see if product vapors are escaping from the vent tubes.

Make sure pipes are not bent or damaged, or obstructed by any objects.

Please DO NOT SMOKE during daily and monthly inspections.

Guard against static discharge during inspections.





### Vapor Recovery System Compliance Calendar

# Requirements for Stage II Vapor Control Systems

### Regulation Citation: 9 VAC 5-40-5220 (F); 9 VAC 5-40-5230 (F)

- Gasoline stations in a designated Stage II area may not pump any gasoline into a gas tank of any motor vehicle unless the transfer is made using a certified Stage II Vapor Recovery System. The Vapor Recovery System must be able to remove, destroy, or prevent discharge of at least 95% (by weight) of all gasoline vapors (volatile organic compound emissions).
- All Stage II Vapor Recovery Systems must be approved as described in the conditions found in Air Quality Policy 9 (AQP-9), Procedures for Implementation of Regulations Covering Stage II Vapor Recovery Systems for Gasoline Dispensing Facilities.
- 3. AQP-9 requires Stage II Vapor Recovery Systems that use coaxial hoses and vapor check valves in the nozzle or remote vapor check valves to be certified by the California Air Resources Board. A list of approved systems is available in the appropriate DEQ Regional Office. The use of any dual vapor recovery hoses or remote check valves that would impede the performance of the required functional tests (see below) must be replaced.

### Registration

A facility owner will register the Stage II System with the appropriate DEQ Regional Office at least 90 days prior to installation of the equipment. The submittal must include the equipment specifications. Use the Facility Registration and Compliance Form (there is a copy at the end of the calendar).

### **Testing**

- To ensure the proper functioning of the automatic shut-off mechanisms an flow prohibiting mechanisms, if applicable, the facility must perform the following tests prior to initial operation of the system and before use by the public:
  - a. Pressure decay/leak test with a vapor space tie test where applicable.
  - b. Pressure Drop vs. Flow/Liquid Blockage Test.
  - Ensure proper functioning of the automatic nozzle shutoff mechanisms. Alternative tests must be approved by DEQ.
- 2. Perform a pressure decay/leak test and a pressure drop vs. flow/liquid blockage test at least every five (5) years.

#### **Notifications**

- No later than 15 days after initial system testing submit the results of the test to the appropriate Regional DEQ Office.
- Notify your DEQ Regional Office at least 2 days prior to Stage II Vapor Recovery system testing.
- Post Operating Instruction Labels for the vapor recovery system on each gasoline pump. A sample label at the end of the calendar. The Instructions must include:
  - a. The following statement: "This gasoline dispenser is fitted with special nozzles to protect you "from breathing gasoline vapors and to reduce air pollution.
  - b. A description of how to correctly dispense gasoline with the particular nozzle on the pump.
  - c. A warning that repeated attempts to pump gasoline after the system has automatically shut off may result in a spill or recirculation of gasoline.
  - d. A telephone number to report problems to the DEQ Stage II Vapor Recovery System Requirements

### **Training**

At least **one full time** facility employee must be trained and certified in the operation and maintenance of Stage II Vapor Recovery Systems. A trained facility operator can train and certify other employees.

Certified training must include:

the purpose of the vapor recovery system

the equipment operation

the maintenance schedules for the equipment

how to perform daily inspections

how to record and maintain Stage II Systems information and records.

# Requirements for Stage II Vapor Control Systems

#### Recordkeeping

The following records must be kept at this facility at all times.

#### 1. Facility Registration and Compliance Form (FRC)

You were required submit a FRC to DEQ when your Stage II Vapor Recovery System was installed. It includes information: facility's name, address, phone number, required signatures, Stage II system information and DEQ information.

If the form was not submitted, immediately complete and return the form to the appropriate DEQ Regional Office. A blank copy can be found at the end.

#### 2. Updated Facility Registration and Compliance Form

You must submit an **updated** FRC Form when any changes are made at the facility, which change any of the information found on the form. The change form should be submitted within 30 days of any change. Submit to the appropriate DEQ Regional Office. **Keep a copy of the most current FRC form on site at all times**. Additional blank forms are available upon request.

#### 3. Training Certificate

Keep on file a verification of employee training, such as a certificate of attendance and training from a certified training program, or certified instructor.

### 4. Inspection and Maintenance Log

Record the results of the daily and monthly maintenance inspections. Also, record any maintenance conducted on any part of the Stage II Vapor Recovery System. This maintenance record should include a general part description and the date repaired or replaced. **Keep all maintenance records for at least two years**.

#### 5. Test Results

A copy of the **most recent** test result for the Stage II Vapor Recovery System. Common tests include, but are not limited to, Pressure Decay/Leak; Dynamic; Liquid Blockage/ Wet; Healy Line Vacuum Test; Air to Liquid/Vapor to Liquid.

**Records, or a copy, <u>must be kept on site and current</u>.** They should be kept in a file box or other easily accessible location. There is a pouch provided on the back of the calendar for keeping records. Facility employees must be aware of these requirements and know the location of the records. They must be available on request or your facility will be considered out of compliance.

#### Inspections

#### **Daily Inspection**

Perform an inspection of Stage II equipment and pumps. Daily inspections include a visual check of the condition of the nozzles and hoses and proper function of the cutoff mechanisms.

#### **Monthly Inspection**

Perform the monthly inspection on the last day of the month. The monthly inspection must include the elements of the daily inspection as well as a check for the following defects:

- 1. A vapor return line that is crimped, flattened, blocked, or that has a hole or slit. Inspect breakaways and swivels.
- 2. A nozzle bellows that has a hole larger than " or a slit larger than 1".
- 3. A nozzle faceplate or face-cone that is torn or missing more than 25% of it's surface.
- 4. A nozzle without an automatic overfill control mechanism or one that is not operating properly.
- 5. A broken of malfunctioning vapor processing unit-defects of the process unit include:
  - a. Leaking return line
  - b. Intermittent process interruptions
  - c. Low vapor pressure in the return to tank line
  - d. Inoperable Stage I control, eg. pressure vacuum vent.



### Vapor Recovery System Compliance Calendar

# Recommended Daily Inspection Check List for Stage II Dispensers

#### **Pumps**

No signs of vapor or liquid leaks, and approved operating and warning labels are present and visible.

#### **Nozzles**

Spouts not bent/worn, loose, or leaking Vapor Recovery holes clear and unblocked Auto shutoff operates correctly Nozzle vapor guard if required by your system

#### **Bellows** (if applicable)

No rips, tears, or loose from nozzle, and faceplate not torn

#### **Hoses**

No kinks, flat spots, tears, or cuts

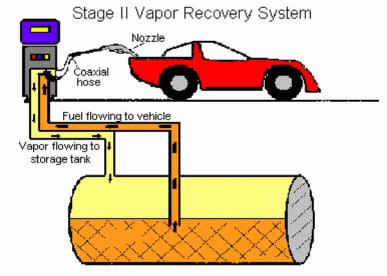
#### **Breakaways**

Secure and tight, with no signs of leaks

#### **Swivels**

Firmly attached and moves freely and no signs of leaks

Treat any dispenser fuel filters, rags, or absorbent materials used to clean up dispenser spills as hazardous waste and handle accordingly, unless test proves material non-hazardous

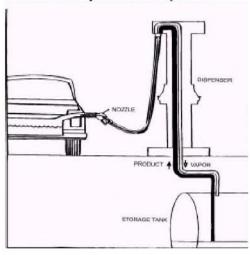


Please **DO NOT SMOKE** during daily and monthly inspections!

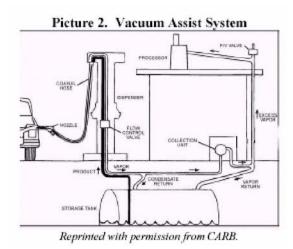
Guard against static discharge during inspections!

# Types of Stage II Systems, Hoses and Poppets

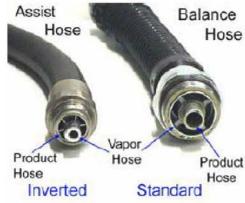
Picture 1. Vapor Balance System



Reprinted with permission from CARB.



Picture 3. Vapor Recovery Hoses

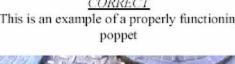


Reprinted with permission from CARB.

### **POPPETS**

CORRECT

This is an example of a properly functioning





Reprinted with permission from CARB

### INCORRECT Poppet valve is stuck in down position and cap is

missing.



Reprinted with permission from MD DEP



# Vapor Recovery System Compliance Calendar

# Examples of Hoses with Problems

INCORRECT
Hose is crimped and has a hole in it.



Reprinted with permission from MD DEP.

INCORRECT Cracked hose.



Source of Photo Unknown.

INCORRECT

Deteriorated Stage II connection hose for the breakaway



Courtesy of VA DEQ Piedmont Office

# INCORRECT Abrasions present on hose.



Source of Photo Unknown

# Underground Storage Tank (UST) Regulatory Background

# Why are the USEPA and Virginia regulating Underground Storage Tanks (USTs)?

Underground storage tanks are regulated to protect the environment (soil, ground water and surface water) from being contaminated by releases. Federal and state regulations require tank owners/operators to install upgraded tanks, maintain the tanks and follow certain procedures. Until the mid-1980s, most USTs and piping were made of bare steel, which is likely to corrode over time and allow UST contents to leak into the environment. Faulty installation or inadequate operating and maintenance procedures also can cause USTs to release their contents into the environment. Releases have also been caused by leaks, spills, and overfills from UST systems.

Today in Virginia there are approximately 30,000 active USTs, at approximately 11,000 facilities. Gasoline or other hazardous substance, leaking from service stations, is one of the most common sources of groundwater pollution. The leaking material seeps into the soil and contaminates the groundwater. Approximately one-half of the population of the United States relies on groundwater as their source of drinking water. Groundwater pollution is a serious problem. Approximately 9700 releases have been documented in Virginia since the Underground Storage Tank Program began. Each one of these releases had the potential to affect drinking water sup- plies. Many municipal and private wells have had to be shut down as the result of contamination caused by releases from UST systems. In addition, fumes and vapors from releases can travel beneath the ground and collect in areas such as basements, utility vaults, and parking garages where they can pose a serious threat of explosion, fire, and asphyxiation or other adverse health effects.

Prevention and clean up of releases are the two primary goals of the programs that regulate USTs. Cleaning up petroleum releases is difficult and usually expensive; it is much easier and less costly to prevent releases before they happen. The old adage of "an ounce of prevention being worth a pound of cure" is particularly relevant to UST systems.

This calendar and its supplemental section(s) are intended to assist a tank owner/operator to properly operate and maintain the tanks and meet other requirements associated with these tanks.

## Does this apply to you – is your business affected?

### The following USTs do not need to meet federal/state requirements for USTs:

Farm and residential tanks of 1,100 gallons or less capacity holding motor fuel used for noncommercial purposes;

Tanks storing heating oil used on the premises where it is stored;

Tanks on or above the floor of underground areas, such as basements or tunnels;

Flow-through process tanks;

Tanks of 10,000 gallons or less capacity and;

Emergency spill and overfill tanks that are emptied (emptied within 24 hours of capturing the product.



# Tank Information for Your Facility

	Tank #	ŧ	Tank #		Tank #		Tank #		Tank #	
Tank Capacity (gallons)										
Substance Stored (if hazardous include CER-CLA name and/or CAS number)										
Material of Construction (□ all that apply)	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping
Fiberglass Reinforced Plastic										
Coated and Cathodically Protected/STI-P3®										
Double Walled										
Impressed Current System Steel										
Composite (Steel Clad with Fiberglass)/ACT 100®										
Lined Interior										
Polyethylene Tank Jacket										
Concrete										
 Excavation Liner										
Asphalt Coated, or Bare										
Steel Secondary										
Containment Polyflexible										
Piping Galvanized Steel										
Other (specify)										
Has tank or piping been repaired?										
Piping Type										
Safe Suction (No Check Valve at Tank) U.S										
Suction (No Check Valve at Tank)										
Pressure										
Gravity Fed									Page 36	

# **UST Compliance Requirements**

## **UST Basic Compliance Requirements**

Yes _	No	1. Is/are the tank(s) registered?
Yes _	No	2. Is the facility in compliance with the 1998 UST upgrade requirements?
		YesNo Do you have spill protection (spill containment provisions at the fill pipe)?
		YesNo Do you have overfill protection
		YesNo Do you have corrosion protection for the tank(s), and piping?
Yes _	No	3. Does the facility have release "Leak" protection for tanks and pipes?
		YesNo Do you have the Monthly Monitoring/inspection Records available?
Yes _	No	4. Does the facility meet the financial responsibility requirements?
Yes _	No	5. Are there any tanks not in use/closed?
		If there are tanks no longer in use, have they been properly closed (physical closure, permits, etc.)?

# **UST Recommended Best Management Practice**

Conduct and Record a monthly walk-through inspection (found on PAGE).

# **UST Required Records**

- 1. Release "Leak" detection performance and maintenance:
  - Most recent 12 months of monitoring results and most recent tightness test results. [If applicable]
  - Copies of performance claims from leak detection manufacturers.
  - Records of maintenance, repair and calibration of on-site leak detection equipment.
- 2. Records showing required inspections and test of corrosion protection system. [If applicable.]
- 3. Records showing that repaired or upgraded UST system was properly repaired or upgraded.
- 4. At least 3 years after closing UST, must keep records of site assessment results required for permanent closure.
- 5. Must have records documenting financial responsibility.



# Requirements for Release "Leak" Detection

All tanks today must meet new tank standards. Tanks installed prior to December 22, 1988 were considered existing tanks. All tanks installed after December 22, 1988 are considered new tanks.

# **New Tanks and Existing Tanks**

## **Monthly Monitoring**

Monthly Monitoring includes monitoring the integrity of the space between the tank walls - double wall tank (Interstitial) or the tank and secondary containment barrier monitoring; Automatic Tank Gauging; Vapor Monitoring; Groundwater Monitoring; Statistical Inventory Reconciliation; and other methods approved by DEQ.

## **OR**

## **Inventory Control and a Tank Tightness Test**

The Tank Tightness Test can be performed by a certified contractor. In Virginia, the contractor can self certify, or seek third party certification. Option only for 10 years after tank installation, or after adding corrosion protection on existing tanks. Tanks 2,000 gallons and smaller may be able to use manual tank gauging (stick measure).

# **New and Existing Pressurized Piping**

Must have an Automatic Line Leak Detector (Shutoff Flow Restrictor, or Continuous Alarm)

# **AND**

You must perform either **Monthly Monitoring** (except Automatic Tank Gauging. Note: Automatic Tank Gauging does not check line pressure), or **Annual Line Tightness Test** 

# **New and Existing Suction Piping**

**No Requirements for certain types of suction systems** (those that have a single check valve at the dispenser and a line slope back to tank that meets technical specifications)

## <u>OR</u>

You must perform Line Tightness testing every 3 years.

## <u>OR</u>

You must perform **Monthly Monitoring** (Except Automatic Tank Gauging. Note that Automatic Tank Gauging does not check line pressure).

# Requirements for Spill and Overfill Protection

### **All Tanks**

Spill and Overfill protection does not apply to tanks that are filled with 25 gallons or less of a liquid at one time.

Must Have Spill Protection = Catchment Basins (spill buckets)

**AND** 

Must Have Overfill Protection = Either Automatic Shutoff Device, or Overfill Alarm, or Ball Float Valve

# Requirements for Corrosion Protection

### **New Tanks and Existing Tanks**

Spill and Overfill protection does not apply to tanks that are filled with 25 gallons or less of a liquid at one time.

Must Have Spill Protection = Catchment Basins (spill buckets)

AND

Must Have Overfill Protection = Either Automatic Shutoff Device, or Overfill Alarm, or Ball Float Valve

## **Existing Tanks - Additional Options**

Must Have a Cathodically Protected Steel Tank (corrosion protection testing required every 3 years)

<u>OR</u>

Must install a Tank Interior Lining (lining must be inspected after 10 years and every 5 years thereafter)

<u>OR</u>

Must Install a Tank Interior Lining and Cathodic Protection

## **New and Existing Piping**

Must use Fiberglass Reinforced Plastic (FRP)

<u>OR</u>

Must use Coated and Cathodically Protected Steel

<u>OR</u>

Must use Another Approved Material (ie. flexible pipe)

# **Existing Piping - Additional Option**

**Use Cathodically Protected Steel** 



# Frequent Walk-Through Inspections - A Best Management Practice

At least monthly, you should conduct basic walk-through inspections of your facility to make sure that your essential equipment is working properly and that you have release response supplies on hand.

These inspections need not be thorough, but they can provide a quick overview of what you can do. You might think of this level of inspection as sort of like the dashboard indicators that we respond to in our automobiles, which provide us with status warnings like "low battery."

## Quickly check at least the following:

**Release Detection System:** Is your release detection equipment working properly? For example, did you run a quick "self-test" of the ATG to verify it is working properly? Or did you check your manual dip stick to make sure it is not warped or worn?

Spill Buckets: Are spill buckets clean, empty, and in good shape?

Overfill Alarm, if you have one: Is your overfill alarm working and easily seen or heard?

**Impressed Current Cathodic Protection System**, if you have one: Is your cathodic protection system turned on? Are you checking your rectifier at least every 60 days?

Fill and Monitoring Ports: Are covers and caps tightly sealed and locked?

Spill and Overfill Response Supplies: Do you have the appropriate supplies for cleaning up a spill or overfill?

Good UST site management should also include the following quick visual checks, in addition to the above:

Dispenser Hoses, Nozzles, and Breakaways: Are they in good condition and working

properly? Dispenser and Dispenser Sumps: Any signs of leaking? Are the sumps clean and

empty? **Piping Sumps**: Any signs of leaking? Are the sumps clean and empty?

If you find any problems during the inspection, you, or your UST contractor need to take action quickly to resolve the problems and avoid serious releases!

# Frequent Walk-Through Inspection Checklist

**Instructions:** Conduct Walk-Through Inspection and complete Checklist, on a monthly basis. Write the date that each monthly inspection was conducted. Write your initials in the box for each device/system inspected, indicating that the device/system was inspected and OK on that date.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Date of Inspection												
Release Detection System												
Inspect for proper operation.												
Spill Buckets												
Ensure spill buckets are clean and empty.												
Overfill Alarm												
Inspect for proper operation. Can a delivery person hear												
or see the alarm when it alarms?												
Impressed Current System												
Inspect for proper operation.												
Fill and Monitoring Ports												
Inspect all fill/monitoring ports and other access points to												
make sure that the covers and caps are tightly sealed or												
locked.												
Spill and Overfill Response Supplies												
Inventory the emergency spill response supplies. If the												
supplies are low restock the supplies. Inspect the												
supplies for deterioration and improper functioning.												
Dispenser Hoses, Nozzles, and Breakaways												
Inspect for loose fittings, deterioration, obvious signs of												
leakage or improper functioning.												
Dispenser and Dispenser Sumps												
Open each dispenser and inspect all visible piping,												
fittings, and couplings for any signs of leakage. If any												
water product is present remove it and dispose of it												
properly. Remove any debris from the sump.												
Piping Sumps												
Inspect all visible piping, fitting, and couplings for any												
signs of leakage. If any water product is present remove												
it and dispose of it properly. Remove any debris from the												
sump.												



#### **DEQ Contacts**

Central Office	Russ Ellison, UST Program Coordinator, (804) 698-4264	
Northern	Cynthia Sale, Remediation Program Manager, (703) 583-3830	Stephen Hughes, Tank Compliance Supervisor, (703) 583-3809
Piedmont	Robyne Bridgman, Remediation Program Manager, (804)527-5057	Kevin Jones, Tank Compliance Supervisor, (804) 527-5103
Tidewater	Dave Borton, Remediation Program Manager, (757) 518-2118	Tom Mdigan, Tank Compliance Supervisor, (757) 518.2115
South Central	Michael Sexton, Remediation Program Manager, (434) 582-6233	Tim Fletcher, Tank Compliance Supervisor, (434) 582-6255
West Central	Bruce Davidson, Remediation Program Manager, (540) 562-6797	Tim Petrie, Tank Compliance Supervisor, (540) 562-6794
Valley	Mac Sterrett, Remediation Program Manager, (540) 574-7835	David Robinett, Tank Compliance Supervisor, (540) 574-7862
Southwest	Dan Manweiler, Remediation Program Manager, (276) 676-4837	Richard Shortridge, Tank Compliance Supervisor, (276) 676-4872

### **Online Resources**

DEQ Petroleum Program
www.deq.state.va.us/tanks/homepage.html
DEQ Underground Storage Tank Program
www.deq.state.va.us/tanks/usts.html
EPA Office of Underground Storage Tanks
www.epa.gov/swerust1/index.htm

# ALERT - Owners of Pre-1985 Fiberglass Tanks Voluntary Activity to Prevent Tank Failures

Fiberglass tanks that were manufactured and installed prior to 1985 have occasionally resulted in releases of massive quantities of fuel and significant environmental damage in Virginia. Many of these older tanks did not have protective "strike plates" or "deflection plates" under all openings (or a designated fill opening) as UL standards recommend. These older fiberglass tanks are subject to punctures from the repetitive insertion of the inventory stick.

Using a strong magnet on a stick/string you can easily determine if your tank's bottom already contains a metal strike plate under the fill opening. Several vendors provide low cost easy to install devices that fit in the drop tube to protect the tank bottom. It is anticipated that a release from an unprotected tank due to penetration of the tank bottom by inventory sticking may be considered negligence on the part of the owner and would disqualify the release from cleanup reimbursement from the Petroleum Storage Tank Fund.



# **Inspection Tips**

#### **Inspection of Facility Information**

- 1. type of Stage II system
- 2. the manufacturer of the Stage II system
- 3. the number of gasoline dispensers
- 4. the number of nozzles per gasoline dispenser
- 5. the monthly throughput of gasoline

#### **Inspection of Facility Records**

- 1. the Stage II Facility Registration and Compliance (FRC) Form
- 2. training documentation for at least one current, full time employee on the proper operation of the Stage II system
- 3. comprehensive maintenance records that include information about damaged equipment and repair.
- 4. results of Stage II system tests, which should be conducted every five years. Note that many manufacturers highly recommend that vapor recovery systems be tested annually to ensure proper function.
- 5. records of daily and monthly inspections of Stage II equipment.
  All records must be up-to-date, and must be maintained for at least 2 years, unless otherwise stated. Copies of source records are permitted, if the original documents are maintained at a central location for the source and are presented in a timely fashion.

### **Inspection of Storage Tanks**

- 1. presence of locking cap(s) on all of the fill adapters and vapor poppets
- 2. whether the locking cap seals tightly on the fill pipe
- 3. whether the gasket on the locking cap is in good condition
- 4. whether the drop tube collar is tight and/or working properly
- 5. condition of the spill containment bucket and whether spill containment bucket is dry and free of debris
- 6. presence of a p/v valve on the vapor line
- 7. presence of a poppet on vapor pipe
- 8. whether the poppet is functioning properly
- 9. whether the fill adapters and vapor poppets tight

## **Inspection of Vent Pipes**

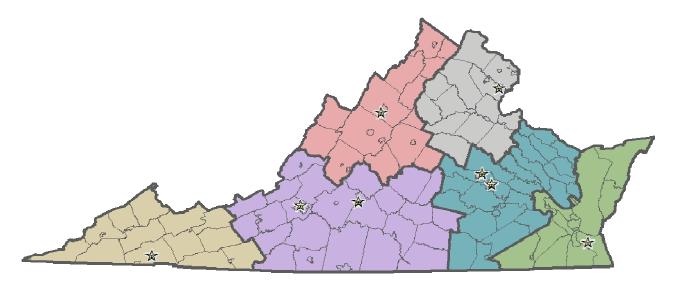
- 1. presence of the vent cap
- 2. any signs that the vent cap may have been tampered with that would prevent its proper functioning
- 3. vent caps are not emitting vapors on a continuous basis

#### **Inspection of Gas Dispensers**

- 1. presence of the Stage II decal
- 2. correct information on the Stage II decal (i.e. instructions, with illustrations, on how to insert the nozzle, dispense gasoline, and how to remove the nozzle; a warning against attempts to continue refueling after automatic shutoff)
- 3. condition of the nozzle, whether the nozzle is damaged, loose, and/or leaking gasoline
- 4. whether the nozzle boots are torn, slit, taped, or loose
- 5. whether the vapor holes on the nozzle are clogged (if applicable)
- 6. whether the locking collar is loose and/or missing
- 7. condition of the hoses
- 8. length of the hose (It is recommended that the hose(s) not drag on the ground when nozzle is resting in cradle of the tank dispenser; allowing the hose(s) to drag on the ground will significantly reduce the life span of the hose and will result in higher operating costs)
- 9. breakaways and whether they are installed properly
- 10. presence of any vapor stains
- 11. excessive fumes
- 12. whether any of the dispensers/pumps were marked out of order
- 13. note the type of nozzles and type of dispensers being used and verify that the equipment being used is compatible

# Stage II Resources <u>DEQ Contacts</u>

Northern Regional Office	Dave Hartshorn, Air Compliance Manager, Woodbridge, (703) 583-3800 www.deq.virginia.gov/regions/northern.html
Piedmont Regional Office	Boots King, Air Compliance Manager, Richmond, (804) 527-5020 www.deq.virginia.gov/regions/piedmont.html
Central Office	Mike Dowd, Small Business Assistance Ombudsman, (804) 698-4394 www.deq.virginia.gov/osba/



Color Code	Regional Office	Address	Phone #	Fax #
	Valley Regional Office	P.O. Box 3000, Harrisonburg, Va. 22801	(540) 574-7800	(540) 574-7878
	Northern Regional Office	13901 Crown Court, Woodbridge, Va. 22193	(703) 583-3800	(703) 583-3801
	Piedmont Regional Office	4949-A Cox Road, Glen Allen, Va. 23060	(804) 527-5020	(804) 527-5106
	Tidewater Regional Office	5636 Southern Blvd., Virginia Beach, Va. 23462	(757) 518-2000	(757) 518-2103
	Blue Ridge Regional Office Combined Lynchburg areas and Roanoke areas in to	7705 Timberlake Road, <u>Lynchburg</u> , Va. 24502	(434) 582-5120	(434) 582-5125
	one region with 2 offices.	3019 Peters Creek Road, Roanoke, Va. 24019	(540) 562-6700	(540) 562-6725
	Southwest Regional Office	355 Deadmore Street, P.O. Box 1688, Abingdon, Va. 24212		

# Example of Stage II Decal for Gasoline Dispensers

# **NOZZLE OPERATION**

THE GASOLINE DISPENSER IS FITTED WITH SPECIAL NOZZLES TO PROTECT YOU FROM BREATHING GASOLINE VAPORS AND TO REDUCE AIR POLLUTION

- 1. INSERT NOZZLE COMPLETELY INTO FILL PIPE
- 2. AFTER PUMPING WAIT THREE (3) SECONDS TO ALLOW NOZZLE TO DRAIN.

# AVOID SPILLAGE DO NOT TOP OFF TANK

REPEATED ATTEMPS TO PUMP GASOLINE AFTER THE AUTOMATIC SHUT-OFF INDICATES YOUR TANK IS FULL MAY MAY RESULT IN SPILLS OR RECIRCULATION OF GAS.

DIRECT QUESTIONS OR COMPLAINTS TO: NORTHERN VIRGINIA AREA – (703) 583-3800 RICHMOND AREA – (804) 527-5020

# COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMTAL QUALITY Stage II - Facility Registration and Compliance Form

Completion of this form is required by and satisfies the requirements of the Virginia Department of Environmental Quality (DEQ) Procedures for Implementation of Regulations Covering Stage II Vapor Recovery Systems for Gasoline Dispensing Facilities, AQP-9. Failure to provide complete and accurate information may delay the operation of your facility. Complete items 1-7 PRIOR to installation of vapor recovery equipment and send a copy of this form to DEQ. Within 30 days of testing the entire vapor recovery system, complete item 8, attach the test results, and send the completed copy of this form to DEQ.

#### PLEASE TYPE OR PRINT CLEARLY

1. FACILITY OV	VNER:				
Name:				Phone:( )	
Business Mailing	Address	,			
City, State:		ZipCode+4:			
2. FACILITY OW	NER/LES	SSEE:			
Name:				Dhono:/	
Business Mailing	Address	Phone:( )			
City, State:		ZipCode+4:			
3. FACILITY INFO	ORMATI	ON:			
Namo:				Dhanar	
Name:	Address	 S:	<del></del>	Phone:( )	
City. State:	Addics			ZipCode+4:	
City, Ctato			<del>-</del>	Zipoddo - 4.	
		LECTION AND CONTROL S			
VAPOR BA	ALANCE	VACUUM ASSIS	ST OTHER:	y equipment that has already been	
		the California Air Resource			
Equipment	# of	Manufacturer's Name	Model Number	CARB # (Executive Order #)	
Nozzles					
Hoses Dispensers					
Бюрепосто					
	DATES (	OF INSTALLATION:	_		
Underground:			Above Ground Equipr		
Month	Day	Year	Month Da	y Year	
7. STATEMENT	OF NOT	IFICATION: (Sign and re	turn one copy)   certi	fy that I have provided the above	
		best of my knowledge it is true		., р	
(Signa	iture of le	egally responsible person)		Date	
			Dhono	( )	
Name:			FIIONE.	()	
Business Mailing Ad	ddress: _				
City, State					
8. STATEMENT OF COMPLIANCE: (sign and return a copy when the installation of equipment has been completed):					
	F COMP	<b>LIANCE:</b> (sign and return a c		Zip Code +4 n of equipment has been completed):	
8. STATEMENT O  I certify that the	equipme	ent listed in item #5 above ha	opy when the installatior		
8. STATEMENT O	equipme	ent listed in item #5 above ha	opy when the installatior	of equipment has been completed):	
8. STATEMENT O  I certify that the	equipme	ent listed in item #5 above ha	opy when the installatior	of equipment has been completed):	
8. STATEMENT O I certify that the C2. (Attach Doo	e equipmo cumentat	ent listed in item #5 above ha	opy when the installatior	of equipment has been completed):	
8. STATEMENT O I certify that the C2. (Attach Doc (Signa	e equipmentate	ent listed in item #5 above ha tion) egally responsible person)	opy when the installatior s been installed and test	of equipment has been completed): ed in accordance with AQP-9, C1 or  Date	
8. STATEMENT O I certify that the C2. (Attach Dod (Signa	e equipmo cumentat sture of le	ent listed in item #5 above hation) egally responsible person) opriate Office. In Northern Vi	opy when the installations been installed and test  rginia area: DEQ-Air Div	of equipment has been completed): ed in accordance with AQP-9, C1 or  Date	

# INDEPENDENT SMALL BUSINESS GASOLINE MARKETER AFFIDAVIT & WORKSHEET FOR CERTIFICATION OF STAGE II VAPOR RECOVERY EQUIPMENT EXEMPTION

the

Commonwealth of Virginia City/County of:	<del></del>
I certify that: I am an independent small business gasoline marketer en following gasoline dispensing facility located in the Comme	
Facility Name:Facility Address:	
Is the above facility used exclusively for the refueling of n equipment, and/or emergency vehicles?	narine vehicles, aircraft, farm  Yes or No
<ul> <li>If YES - STOP here. Sign, notarize and return this document</li> <li>2. *What is the above facility's Average Monthly Throughput</li> <li>AMT Gallons = gallons.</li> </ul>	t to the Va. DEQ. t (AMT) in gallons?
Is the AMT <u>LESS</u> than 10,000 gallons?	Yes or No
If YES - STOP here. Sign, notarize and return this document	
3. Do you own the above gas dispensing facility AND are you procurement and installation of vapor recovery equipment?	ou required to pay for the Yes or No
<ul><li>If NO - STOP here. Return this document the Va. DEQ with the owner of the gas dispensing facility.</li><li>4. *What percentage of your annual income is from the mar</li></ul>	
*Are you a refiner of gasoline?	Yes or No
7 to you a rollinor or gasomic.	1.00 0. 110
If YES - then what percentage of your annual income if from	
5. Does a refiner own more than 50% of your business?	Yes or No
6. Does your business own more than 50% of a refiner?	Yes or No
7. Does another company/person own more that 50% of your 8. If YES – does that company/person own more that 50% of your series of the term	
<ul><li>9. Is your business directly or indirectly affiliated with a refining of the state of th</li></ul>	er, company or person? Yes or No
<b>10.</b> Do they own more than 50% of a refiner or,	Yes or No
11. Does a refiner own more that 50% of them?	Yes or No
12. Is this affiliation solely by means of a supply contract or to      * NOTE: Use Worksheet on page 3 to complete this inform	-
I swear that the information contained in this Affidavit is tru	
<del>(</del>	Signature of Marketer)
<del>-</del>	Print Name of Marketer)
Subscribed and sworn to before me by,	(Name of Marketer) on this
<u>-</u>	Notary Public
My Commission expires:	

# INDEPENDENT SMALL BUSINESS GASOLINE MARKETER WORKSHEET

Facility Name:	
Facility Owner:	
Facility Location:	·
A. Gross Income	\$
	Ψ
(Total income for the most recent calendar year)  B. Gross Income from Gas Sales	\$
	Ψ
(Income from gas sales ONLY - DO NOT include diesel, for the same 12 months used in Question A)	
C. Gasoline Sales % =	%
(Answer to Question B divided by Answer to Question A) x 100	
D. Gallons of gas pumped in the last two calendar years	gallons
E. Average Monthly Throughput =	gallons
E. Average Monthly Throughput =  (Answer to Question D divided by 24)	gallons
	itation that shows
(Answer to Question D divided by 24)  I agree that these figures are accurate and I have attached document Gross Income, Gross Income from Gasoline Sales for the last calendary	itation that shows
I agree that these figures are accurate and I have <b>attached document</b> Gross Income, Gross Income from Gasoline Sales for the last calenda Throughput for the last two calendar years.	itation that shows

#### What Is The Compliance Date?

- New Sources (affected sources constructed since November 9, 2006): January 10, 2008 or upon startup if startup occurs after January 10, 2008.
- Existing Sources: January 10, 2011.

### **What Are The Permitting Requirements?**

Owners and operators of GDF are not required to obtain title V permits because of being subject to this rule; however, if a source is otherwise required to obtain a title V permit (applicability criteria found in 40 CFR 70.3(a) and (b) or 40 CFR 71.3(a) and (b)), the source must apply for and obtain a title V permit.

#### What Records Are Required?

#### Reporting:

 Reporting requirements for owners and operators of GDF are limited in most cases to the Initial Notification and Notification of Compliance Status. Those GDF currently operating submerged fill or submerged fill plus vapor balancing equipment that is in compliance with an enforceable State, local, or tribal rule are not required to submit these notifications. See Table 1 for reporting requirements based on the GDF's monthly gasoline throughput.

### Recordkeeping:

- Keep records of initial and every three year pressure test for certain vapor balancing systems.
- Records must be kept for a period of 5 years.

# You can also contact your Regional EPA air toxics office at the following numbers:

Address	States	Website/ Phone Number
Region 1 1 Congress Street Suite 1100 Boston, MA 02114-2023	CT, MA, ME, NH, RI, VT	www.epa.gov/region1 (888)372-7341 (617) 918-1650
Region 2 290 Broadway New York, NY 10007-1866	NJ, NY, PR, VI	www.epa.gov/region2 (212) 637-4023
Region 3 1650 Arch Street Philadelphia, PA 19103-2029	DE, MD, PA, VA, WV, DC	www.epa.gov/region3 (800) 228-8711 (215) 814-2196
Region 4 Atlanta Federal Center 61 Forsyth Street, SW Atlanta, GA 30303-8960	FL, NC, SC, KY TN, GA, AL, MS	www.epa.gov/region4 (404) 562-9131 (800) 241-1754
Region 5 77 West Jackson Blvd. Chicago, IL 60604-3507	IL, IN, MI, WI, MN, OH	www.epa.gov/region5 (312) 886-6812 (312) 353-6684 (312) 886-6798
Region 6 1445 Ross Avenue Suite 1200 Dallas, TX 75202-2733	AR, LA, NM, OK, TX	www.epa.gov/region6 (800) 621-8431* (214)-665-7171
Region 7 901 North Fifth Street Kansas City, KS 66101	IA, KS, MO, NE	www.epa.gov/region7 (800) 223-0425 (913)-551-7003
Region 8 1595 Wynkoop St. Denver, CO 80202-1129	CO, MT, ND, SD, UT, WY	www.epa.gov/region8 (800) 227-8917* (303) 312-6460
Region 9 75 Hawthorne Street San Francisco, CA 94105	CA, AZ, HI, NV, GU, AS, MP	www.epa.gov/region9 (415) 744-1197
Region 10 1200 6 <sup>th</sup> Ave. Suite 900, AWT-107 Seattle, WA 98101	AK, ID WA, OR	www.epa.gov/region10 (800) 424-4372* (206) 553-6220

<sup>\*</sup> For sources within the region only.

#### For More Information

Copies of the rule and other materials are located at: http://www.epa.gov/ttn/atw/area/arearules.html

For more information on state requirements, please contact your state representative found at the following link: http://www.4cleanair.org/contactUsaLevel.asp United States Environmental Protection Agency March 2008

www.epa.gov/ttn/atw/eparules.html

Office of Air Quality Planning & Standards (El 43-02)



# Summary of Regulations Controlling Air Emissions from

GASOLINE DISPENSING FACILITIES (GDF)



NATIONAL EMISSION
STANDARDS FOR
HAZARDOUS AIR
POLLUTANTS
NESHAP
(SUBPART CCCCCC)

**FINAL RULE** 



## GASOLINE DISPENSING FACILITIES (GDF (SUBPART CCCCCC)

#### What Is an Area Source?

Any source that is not a major source.
 (A major source is a facility that emits, or has the potential to emit in the absence of controls, at least 10 tons per year (TPY) of individual hazardous air pollutants (HAP) or 25 TPY of combined HAP.)

### Who Does This Rule Apply To?

 This rule applies to existing or new gasoline dispensing facilities (GDF) that are area sources. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank. The equipment used for refueling of motor vehicles is not covered by this rule.

### What Am I Required To Do?

 Meet requirements in subpart CCCCC depending on the GDF's monthly gasoline throughput. (See Table 1.)

## **Compliance Demonstration**

 Some owners or operators, depending on what vapor balance option is met, must determine, at the time of installation and every 3 years thereafter, the leak rate and cracking pressure of pressure-vacuum vent valves installed on gasoline storage tanks. Some owners or operators, depending on what vapor balance option is met, must also conduct a static pressure test on gasoline storage tanks.



Table 1. National Air Toxic Standards for Gasoline Dispensing Facilities (GDF) (40 CFR 63, Subpart CCCCC)<sup>1</sup>

Monthly Throughput	Requirements:  (Must be in compliance by 1/10/2011 for existing GDF, and upon startup <sup>2</sup> for new GDF)	Reporting
< 10,000 gallons	Minimize spills.     Clean up spills expeditiously.     Cover gasoline containers & storage tank fill pipes with gasketed seal.     Minimize gasoline sent to open collection systems.	None, however must be able to demonstrate, within 24 hours of request, throughput is below 10,000 gallons per month.
≥ 10,000 gallons	All of the above, plus:  5. For storage tanks ≥ 250 gallons capacity, load storage tank using submerged fill with discharge that is no more than the following from the bottom of tank:  a) 12 inches for pipes installed on or before 11/9/2006  b) 6 inches for pipes installed after 11/9/2006.	Initial Notification by 5/9/08 for existing GDF, and within 15 days for new or reconstructed GDF <sup>3</sup> Compliance status by 1/10/11.
≥ 100,000 gallons	All of the above, plus one of the below:  6. Operate a vapor balance system installed prior to 1/10/08, that meets an enforceable State, local, or tribal rule or permit that requires, either  a) Achieves an emission reduction of at least 90%, or  b) Operates meeting the management practices specified below (#7).  7. Operate vapor balance system during storage tank loadings using the following management practices.  a) Equip connections & lines with seal closures  b) Vapor tight line from storage tank to cargo tank  c) Cargo Tank pressure remains below specified settings  d) Designed to prevent over tight/loose fittings  e) Gauge well provided with submerged drop tube extending specified distance (see item 5) from tank bottom  f) Use vapor tight caps for liquid fill connections  g) Install pressure/vacuum vent valves on tank vent pipes at specified setting, and test initially and every 3 years  h) Vapor balance system must meet static pressure test initially and every 3 years  i) Dual-point (no coaxial) vapor balance systems for new GDF or tanks, and reconstructed GDF.	Same as 1 & 2 above, plus: 3. Keep records, report, and test as specified in enforceable conditions.  Same as 1 & 2 above, plus: 4. Keep record of initial and every three year pressure tests.  Same as 1, 2, & 4 above, plus: 5. Test notification 60 days before test and test results.
	8. Vapor balance system demonstrated to achieve a reduction of 95% or better.	before test and test results 180 days after testing.

- 1. This is a summary table; compliance will only be determined by compliance with actual rule text in 40 CFR 63, subpart CCCCCC.
- 2. New and reconstructed GDF constructed after 11/9/2006 must be in compliance upon startup or 1/10/2008, whichever is later.
- 3. In some cases, Initial Notification and Notification of Compliance Status are not required if submerged fill and/or vapor balance system was installed prior to 1/10/08 and meets certain prior enforceable conditions (see 63.11124(a)(3) and (b)(3)).

 Owners or operators of GDF using the vapor balance option (number 8 in the enclosed Table 1) must demonstrate initial compliance by conducting an initial performance test to demonstrate that the vapor balance system achieves 95 percent reduction.

### What are the Impacts?

 National emissions reductions and costs for vapor balancing are about 50,000 tons of volatile organic compounds (VOC) (including 2,300 tons of HAP) reduced, at a capital cost of \$44 million and an annualized cost of \$9.3 million per year.